

Date: Wednesday, 1/31/2007 2:52:19  
User: Kim Johnston

# Process Sheet

Customer : CU-DAR001 Dart Helicopters Services  
Job Number : 30530  
Estimate Number : 10262  
P.O. Number : *NIA*  
This Issue : 1/31/2007 S.O. No. : *NIA*  
Prsht Rev. : NC  
First Issue : *NIA* Type : LANDING GEAR  
Previous Run : 29973  
Written By : *JA 07.02.01*  
Checked & Approved By :  
Comment : Est Rev: I 02.09.25 Rearranged procedure steps KJ  
Est Rev: J 06-03-23 As per Rev D JLM  
Est Rev: J 06-07.13 As per dsi9343 EC

Drawing Name : 350 SKIDTUBE ASSEMBLY LH  
Part Number : D350636011  
Drawing Number : D2750  
Project Number : N/A  
Drawing Revision : D  
Material : *NIA*  
Due Date : 2/15/2007 Qty: 1 Um: Each

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description:
1.0	DC	DOCUMENT CONTROL

1.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy blue file and type labels per PPP D350-636-011 CHG 002

2.0

D26003BENT

Extrusion Bent



Comment: Qty.: 1 Each(s)/Unit Total: 1 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2600-3-Bent

Extrusion (Bent)

*B29327 Pm 07-02-26*

3.0

D2744

Fwd Cap



Comment: Qty.: 1 Each(s)/Unit Total: 1 Each(s)

Cap

Batch:

*B27559*

*BE 07-02-27*

4.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1- Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Debur end *Pm 07-02-26*

2- Drill pilot holes as per Dwg D2750 sheet 3 (D2750-1 details). Drill using drill Jig DT8150 & DT8863 drilling holes labelled "A" only. *Pm 07-02-26*

3- Mark fwd end for cutting using Drill Jig DT 8150 & DT8863 and cut *Pm 07-02-27*

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/31/2007 2:52:19 PM  
User: Kim Johnston

# Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30530

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description:

as per dwg D2750.

4-Drill pilot holes for Detail B using DT8330

*Pr 07-02-27*

5-Open up holes for Detail B, "hole size W" and blade fitting location holes to 0.500" (total of 9 holes per side) as per dwg D2750

*Pr 07-02-27*

6-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 and open to 0.250" \*\*\*Make sure that wearplate holes are on bottom of tube\*\*\*\*\*

*Pr 07-02-27*

7-Open up holes of Detail A to 0.250" (total of 2 holes per side)

*Pr 07-02-27*

8- Countersink all fwd wearshoe holes (total of 19 holes per side) DO NOT C'SINK THE LAST AFT HOLES (total of 2 per side for blade fitting) as per dwg D2750

*Pr 07-02-27*

9-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004 A/R Aluminum Rod

*m/02756 BE 07-02-27*

10-Grind welds flush as per Dwg D2750

*BE 07-03-06*

11-Countersink Detail A as per dwg D2750.

*BE 07-03-06*

12- Scribe batch# inside per dwg D2750

*Pr 07-02-27*

5.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

*11/07/03/05*

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*DP 7-3-2*

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

*Pr 07-03-05*

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

*BE 07-03-05*

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Date: Wednesday, 1/31/2007 2:52:19 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30530

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

9.0

D2739

350 I Beam



Comment: Qty.: 1 Each(s)/Unit Total: 1 Each(s)

Web

Batch:

B30447

fm/ll

07-03-05

10.0

D34901

CROSS BOLT SPACER



Comment: Qty.: 4 Each(s)/Unit Total: 4 Each(s)

Crossbolt spacer

Batch:

B29981

BE

07-03-07

11.0

D34903

CROSS BOLT SPACER



Comment: Qty.: 4 Each(s)/Unit Total: 4 Each(s)

Crossbolt spacer

Batch:

B29982

BE

07-03-07

12.0

D2743

Crossbolt Spacer



Comment: Qty.: 8 Each(s)/Unit Total: 8 Each(s)

Crossbolt Spacer

Batch:

B29342

BE

07-03-07

13.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open up holes of Detail V & Detail C to 0.625" (total of 8 holes per side) as per dwg D2750.

fm/ll 07-03-05

2-Open up holes of Detail D to 0.750" (total of 4 holes per side) as per dwg D2750.

fm/ll 07-03-05

3-Chamfer holes of Detail V, Detail C, Detail D and hole size "W" per dwg D2750 (welding instructions on sheet 4)

fm/ll 07-03-05

4-Deburr and blow out all chips from inside of tube

fm/ll 07/03/05

6-Bond web D2739 in place as per QSI 015

A/R

Sikaflex-291

batch:

M103497

exp. date:

07-10-09

fm/ll

07-03-05

7- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/31/2007 2:52:19 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30530

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description:

(welding instructions on sheet 4)

A/R

Aluminum Rod

batch: *M103317 BE 07-03-07*

8-Grind welds flush as per Dwg D2750 *Pm 07-03-07 ①*

9-Spot face ground handling holes section J-J (total of 4 places per side) as per dwg D2750 *Pm 07-03-07 ①*

10-Deburr holes *Pm 07-03-07 ①*

14.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

*07/03/08 ①*

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*07/03/08 ①*

16.0

POWDER COATING

POWDER COATING



*M103706*



Comment: POWDER COATING

Powder Coat Gloss White (Ref. 4.3.5.1) as per Dart QSI 005 4.3

*FL/MR 07/03/14 ①*

17.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Inspect for foreign object per QSI 024

*FC 09/03/15 ①*

18.0

NAS1330S3KB166

INSERT



Comment: Qty.: 42 Each(s)/Unit Total: 42 Each(s)

INSERT

Batch: *M103472*

19.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install inserts as per Dwg D2750

*HD 07-03-15 ①*

20.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Inspect Inserts

*LD 07-03-15 ①*

*HD 07-03-16 ①*

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries



Date: Wednesday, 1/31/2007 2:52:19 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30530

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

21.0

D26483

Wearpad



Comment: Qty.: 5 Each(s)/Unit Total : 5 Each(s)

Wearpad

Batch: B29778

22.0

D265613

Wearplate



Comment: Qty.: 1 Each(s)/Unit Total : 1 Each(s)

Wearplate

Batch: B29009 B29976

23.0

D265635

Wearplate



Comment: Qty.: 1 Each(s)/Unit Total : 1 Each(s)

Wearplate

Batch: B29337

24.0

D2746

Wearshoe



Comment: Qty.: 1 Each(s)/Unit Total : 1 Each(s)

Wearplate

Batch: B29012

25.0

D2745

Bushing



Comment: Qty.: 8 Each(s)/Unit Total : 8 Each(s)

Bushing

Batch: B29437

26.0

D3488041

BLADE FITTING ASSEMBLY, LH



Comment: Qty.: 1 Each(s)/Unit Total : 1 Each(s)

Blade Fitting, LH

Batch: B28318

27.0

D3492041

PLUG ASSEMBLY



Comment: Qty.: 8 Each(s)/Unit Total : 8 Each(s)

PLUG ASSEMBLY

Batch: 2 batches

52 x B29363 }  
6 x B28960 }

07-03-16

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Date: Wednesday, 1/31/2007 2:52:19 PM

User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30530

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

28.0

D3492043

PLUG ASSEMBLY



Comment: Qty.: 8 Each(s)/Unit Total : 8 Each(s)

PLUG ASSEMBLY

Batch: 829984

29.0

AN3C5A

Bolt



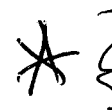
Comment: Qty.: 38 Each(s)/Unit Total : 38 Each(s)

Bolt

Batch: 2 batches

32x M101189

6x M10364



30.0

AN3C6A

BOLT



Comment: Qty.: 4 Each(s)/Unit Total : 4 Each(s)

Bolt

Batch: M101418

31.0

AN3C7A

BOLT



Comment: Qty.: 4 Each(s)/Unit Total : 4 Each(s)

BOLT

Batch: M102254

32.0

AN6C44A

BOLT



Comment: Qty.: 4 Each(s)/Unit Total : 4 Each(s)

BOLT

Batch: M103361

33.0

AN8C35A

BOLT



Comment: Qty.: 1 Each(s)/Unit Total : 1 Each(s)

BOLT

Batch: M102180

34.0

AN960C10L

washer



Comment: Qty.: 46 Each(s)/Unit Total : 46 Each(s)

washer

Batch: M103344

HJ

07-03-16

①

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/31/2007 2:52:19 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30530

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

35.0

AN960C816L

WASHER



Comment: Qty.: 2 Each(s)/Unit Total : 2 Each(s)

WASHER

Batch: M100186

36.0

MS210436

NUT



Comment: Qty.: 4 Each(s)/Unit Total : 4 Each(s)

NUT

Batch: M102532

37.0

MS21083C8

NUT



Comment: Qty.: 1 Each(s)/Unit Total : 1 Each(s)

NUT

Batch: M103492

38.0

NAS1515H3L

WASHER



Comment: Qty.: 46 Each(s)/Unit Total : 46 Each(s)

WASHER

Batch: M103641

39.0

NAS1515H8L

WASHER



Comment: Qty.: 10 Each(s)/Unit Total : 10 Each(s)

WASHER

Batch: M102515

40.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3" batch: M103581

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750

SIKA FLEX 241

BATCH: M103497

EXP DATE: 07-10

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/31/2007 2:52:19 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30530

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description:

4-Coat all exposed fasteners with "LPS Procyon"

batch: M7168

*JS*

07-03-16①

41.0

QC5

INSPECT WORK TO CURRENT STEP



*0703-19*



Comment: INSPECT WORK TO CURRENT STEP

42.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

43.0

D2741

Blade



Comment: Qty.: 1 Each(s)/Unit Total: 1 Each(s)

Blade

Batch: B29868

44.0

AN960C816L

WASHER



Comment: Qty.: 2 Each(s)/Unit Total: 2 Each(s)

Washer

Batch: M100186

45.0

MS21083C8

NUT



Comment: Qty.: 2 Each(s)/Unit Total: 2 Each(s)

Nut

Batch: M100186

46.0

AN8C21A

BOLT



Comment: Qty.: 2 Each(s)/Unit Total: 2 Each(s)

Bolt

Batch: M103547

47.0

NAS1515H8L3

WASHER



Comment: Qty.: 2 Each(s)/Unit Total: 2 Each(s)

WASHER

Batch: M102515

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/03/21

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries



Date: Wednesday, 1/31/2007 2:52:19 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30530

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

48.0

D34931

WASHER



Comment: Qty.: 2 Each(s)/Unit Total: 2 Each(s)

WASHER

Batch: B29798

49.0

D35321

spacer



Comment: Qty.: 2 (s)/Unit Total: 2 (s)

batch: B27894

7/03/20

59

50.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

51.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Package as per PPP D350-636-011

52.0

QC21

FINAL INSPECTION W/O RELEASE



Comment: FINAL INSPECTION W/O RELEASE

Job Completion



U 07-03-21

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries

**DART**RELEASED  
dc-02-07

DESIGN <i>P44</i>	DRAWN BY <i>P44</i>	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2750	REV. D SHEET 1 OF 5
DATE 06.01.05		TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS
A	98.04.16	NEW ISSUE	
B	98.09.01	CHANGE MS24694-S293 TO AN8-16A	
C	98.11.18	ADD D2750-3/D2750-4 INCORPORATE D2738 AND D2740	
D	06.01.05	ADD HOLES AND SPACERS FOR APICAL FLOATS INCORPORATE DEO 9133/9157	

Qty -041	Qty -042	Qty -043	Qty -044	Part Number	Description
X				D2750-041	SKIDTUBE ASSEMBLY, LH
	X			D2750-042	SKIDTUBE ASSEMBLY, RH
		X		D2750-043	SKIDTUBE ASSEMBLY, LH
			X	D2750-044	SKIDTUBE ASSEMBLY, RH
5	5	5	5	D2648-3	WEARPAD
1	1	1	1	D2656-13	WEARSHOE
1	1	1	1	D2656-35	WEARSHOE
1	1	1	1	D2746	WEARSHOE
1	1	1	1	D2739	WEB
1	1	1	1	D2741	BLADE
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
38	38	38	38	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN3C7A	BOLT
4	4	4	4	AN6C44A	BOLT
2	2	2	2	AN8C21A	BOLT
1	1	1	1	AN8C35A	BOLT
46	46	46	46	AN960C10L	WASHER
4	4	4	4	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
3	3	3	3	MS21083C8	NUT
42	42	42	42	NAS1330S3KB166	INSERT
46	46	46	46	NAS1515H3L	WASHER
12	12	12	12	NAS1515H8L	WASHER

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 30530

Copyright © 1998 by DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



DESIGN PH	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED H	APPROVED H	DRAWING NO. D2750	REV. D SHEET 2 OF 5
DATE 06.01.05		TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS

RELEASED  
06-02-07

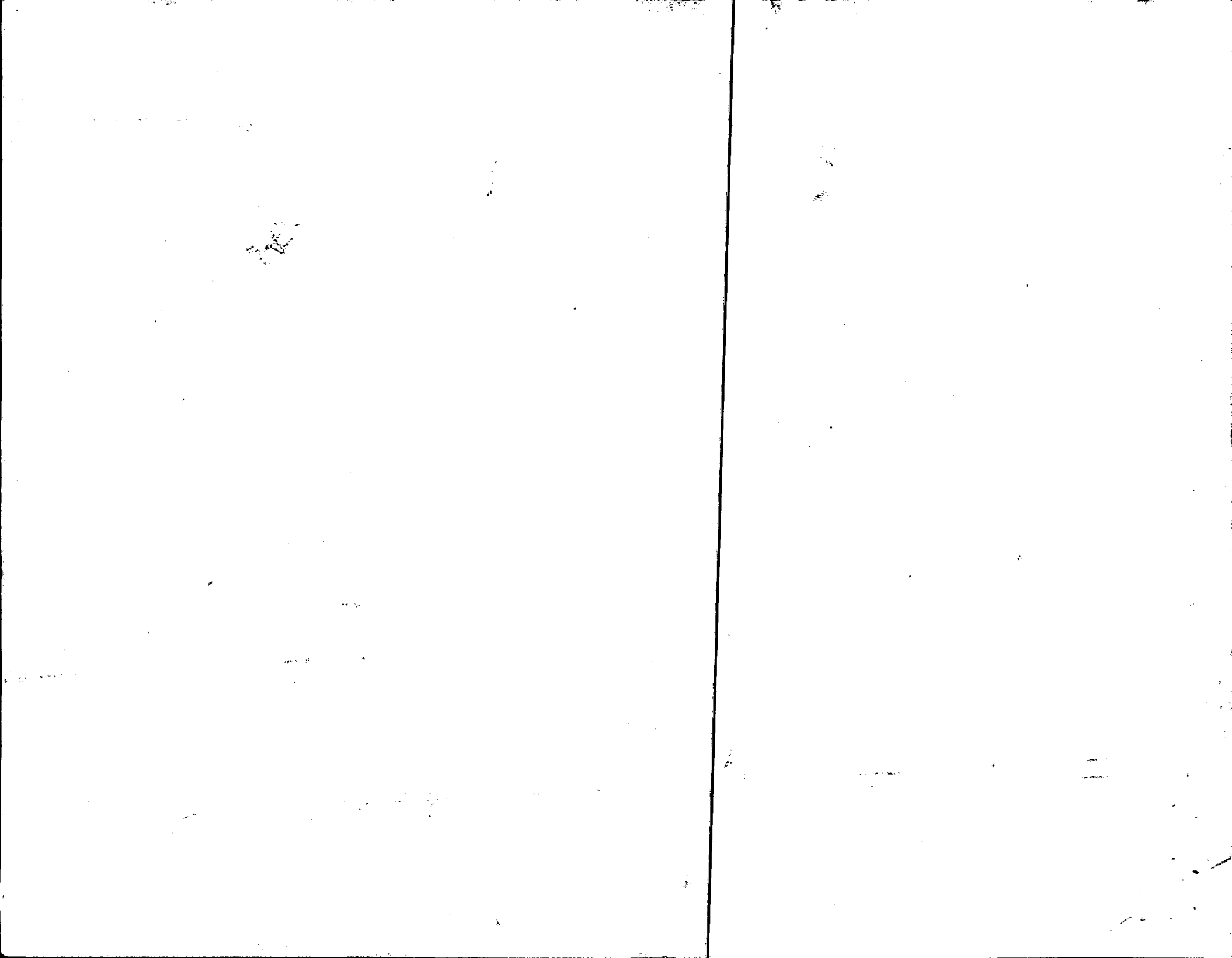
GENERAL NOTES:

1. ALL DIMENSIONS ARE IN INCHES
2. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
3. MAKE FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
4. DAMAGE TOLERANCE ON BENDING:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 12 INCHES ABOVE THE GROUND. NO GOUGING IS ACCEPTABLE IN THE FLAT PORTION OF THE TUBE. GOUGES UP TO 0.020 ARE ACCEPTABLE IN THE BENT PORTION OF THE TUBE. TUBE O.D. SHOULD BE  $3.150 \pm 0.010$  IN THE FLAT PORTION OF THE TUBE. TUBE O.D. SHOULD BE  $3.15 \pm 0.030$  IN THE BENT PORTION OF THE TUBE.
5. ALL HOLES DRILLED ON CENTERLINES EXCEPT THOSE NOTED BY SECTIONS E-E, F-F, AND R-R.
6. WELDING TO BE DONE PER DART QSI 004.
7. FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:  
MINIMUM YIELD TENSILE STRENGTH = 35 ksi  
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
8. FINISH:  
ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.  
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
9. INSTALL NAS1330S3KB166 INSERTS AFTER FINISH AS INDICATED IN D2750-1/-2/-3/-4 WELDING DETAIL ON PAGE 4 AND 5. DRILL 'E' SIZE HOLES ( $\emptyset 0.250$ -  $\emptyset 0.257$ ) FOR WEARSHOE INSERTS. C'SINK  $\emptyset 0.391 \times 100^\circ$  AND INSTALL INSERTS
10. D3488-041 (OR D3488-042) BLADE FITTING AND AN3-5A/AN3-7A WEARSHOE SCREWS TO BE INSTALLED USING SIKAFLEX-241 (OR EQUIVALENT) SEALANT.
11. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF. POWDER COATING WITH MEK DEGREASER.
12. APPLY A LAYER OF SIKAFLEX -241/-291 ADHESIVE BETWEEN THE BOTTOM OF THE SKIDTUBE ASSEMBLY AND THE WEARPLATES

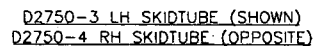
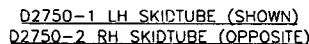
SHOP COPY  
RETURN TO  
ENGINEERING  
CONTROLLED  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
NO. 30530

Copyright © 1998 by DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



a.02.07 #



UNCONTROLLED  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE

SHOP COPY  
RETURN TO  
ENGINEERING  
CONTROLLED COPY

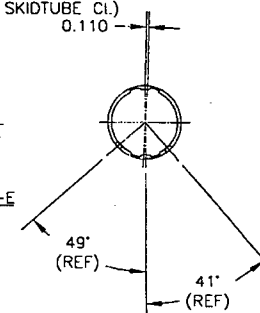
DETAIL A

$\varnothing 0.500^{+0.010}_{-0.000}$   
(8 PLACES)



Technical drawing of a circular part. A horizontal line is shown with an arrow pointing to it. A line segment is drawn at an angle of  $17^\circ$  to the horizontal. A circle is shown with a vertical centerline and a horizontal centerline. The circle is divided into four quadrants by these centerlines. The top-right quadrant is shaded with diagonal lines.

SECTION E-E



SECTION F-F



SECTION R-R

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL  
AND IS SUPPLIED ON THE EXPRESS CONDITION  
THAT IT IS NOT TO BE USED FOR ANY PURPOSE  
OR COPIED OR COMMUNICATED TO ANY OTHER  
PERSON WITHOUT WRITTEN PERMISSION FROM  
DART AEROSPACE USA, INC.

**DRAWN BY**

APPROVED

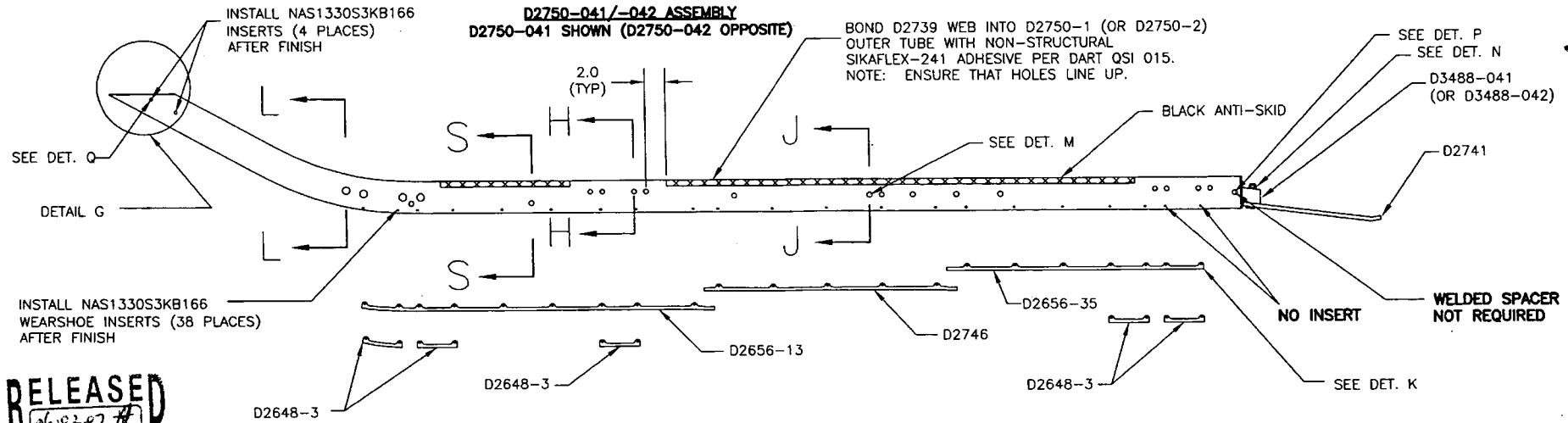
\_\_\_\_\_

DRAWING NO.	REV. D
-------------	--------

TITLE	SCALE
-------	-------

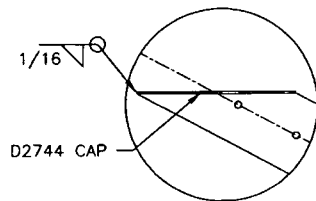
350 SKIDTUBE ASSEMBLY 1:20

**D2750-041/-042 ASSEMBLY**  
**D2750-041 SHOWN (D2750-042 OPPOSITE)**



**RELEASED**  
 06-02-07 #

**DETAIL G**



**SECTION H-H**



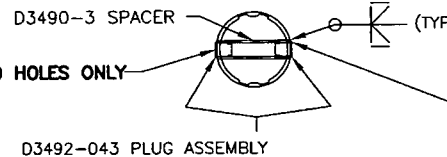
**SECTION J-J**



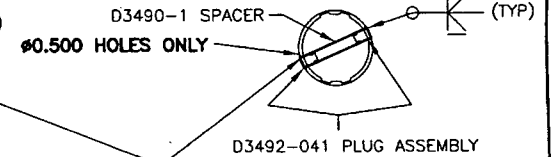
**WELDING INSTRUCTIONS**

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2743 SPACER
3. WELD INTO PLACE
4. GRIND FLUSH
5. DRILL OUT SPACER TO Ø0.484
6. SPOT FACE Ø0.750 (SECTION J-J ONLY)

**SECTION L-L**



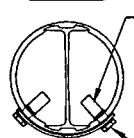
**SECTION S-S**



**WELDING INSTRUCTIONS**

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D3490-1 SPACER (4 PLACES) INTO Ø0.500 HOLES OR INSERT D3490-3 SPACER (4 PLACES) INTO Ø0.750 HOLES
3. WELD INTO PLACE
4. GRIND FLUSH
5. INSERT D3492-041 PLUG ASSEMBLY (8 PLACES) INTO D3490-1 SPACER OR INSERT D3492-043 PLUG ASSEMBLY (8 PLACES) INTO D3490-3 SPACER ON BOTH ENDS

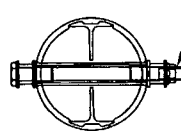
**DETAIL K**



USE AN3C7A BOLTS FOR INSTALLING AFT D2648-3 WEARPAD (4 PLACES)

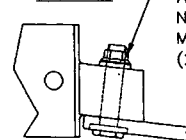
AN3C5A BOLT (1)  
 AN960JD10L WASHER (1)  
 NAS1515H3L WASHER (1)  
 (38 PLACES)

**DETAIL M**



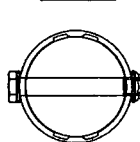
AN6-44A BOLT (1)  
 D2745 BUSHING (2)  
 NAS1515H8L WASHER (2)  
 MS21043-6 NUT (1)  
 (4 PLACES)  
**NOTE: INSTALL WASHER BETWEEN SKIDTUBE AND BUSHING**

**DETAIL N**



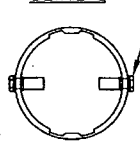
AN8C21A BOLT (1)  
 AN960JD816L WASHER (1)  
 NAS1515H8L WASHER (1)  
 MS21083C8 NUT (1)  
 (2 PLACES)

**DETAIL P**



AN8C35A BOLT (1)  
 AN960C816L WASHER (2)  
 NAS1515H8L WASHER (2)  
 MS21083C8 NUT (1)

**DETAIL Q**



AN3C6A BOLT (1)  
 AN960C10L WASHER (1)  
 NAS1515H3L WASHER (1)  
 (4 PLACES)

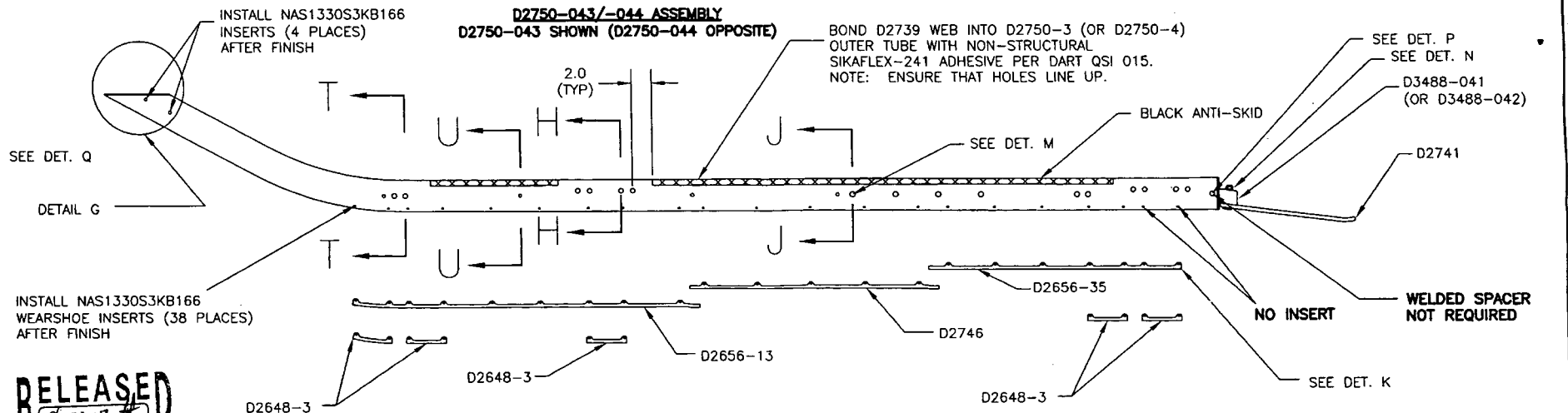
COPYRIGHT © 1996 BY DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

DESIGN	DRAWN BY	<b>DART</b> DART AEROSPACE USA, INC. PORT HADLOCK, MA	
CHECKED	APPROVED	DRAWING NO.	REV. D
DATE		D2750	SHEET 4 OF 5
06.01.05		TITLE	SCALE
		350 SKIDTUBE ASSEMBLY	1:20

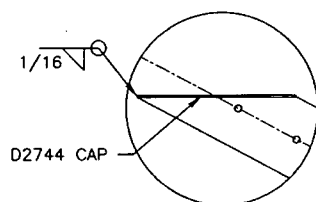
SHOP COPY  
 RETURN TO  
 ENGINEERING  
 CONTROLLED COPY  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NO. 30530

**D2750-043/-044 ASSEMBLY**  
**D2750-043 SHOWN (D2750-044 OPPOSITE)**



**RELEASED**  
 06-02-07-17

**DETAIL G**



**SECTION H-H** D2743 SPACER (REF)



**SECTION J-J**



**WELDING INSTRUCTIONS**

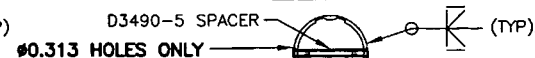
1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2743 SPACER
3. WELD INTO PLACE
4. GRIND FLUSH
5. DRILL OUT SPACER TO Ø0.484
6. SPOT FACE Ø0.750 (SECTION J-J ONLY)

**SECTION T-T**



D3492-041 PLUG ASSEMBLY

**SECTION U-U**



D3492-045 PLUG ASSEMBLY

**WELDING INSTRUCTIONS**

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D3490-5 SPACER (4 PLACES) INTO Ø0.313 HOLES OR INSERT D3490-1 SPACER (4 PLACES) INTO Ø0.500 HOLES
3. WELD INTO PLACE
4. GRIND FLUSH
5. INSERT D3492-045 PLUG ASSEMBLY (8 PLACES) INTO D3490-5 SPACER OR INSERT D3492-041 PLUG ASSEMBLY (8 PLACES) INTO D3490-1 SPACER ON BOTH ENDS

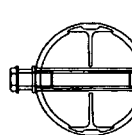
**DETAIL K**



USE AN3C7A BOLTS FOR INSTALLING AFT D2648-3 WEARPAD (4 PLACES)

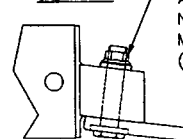
AN3C5A BOLT (1)  
 AN960C10L WASHER (1)  
 NAS1515H3L WASHER (1)  
 (38 PLACES)

**DETAIL M**



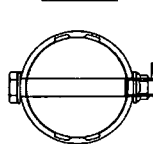
AN6C44A BOLT (1)  
 D2745 BUSHING (2)  
 NAS1515H8L WASHER (2)  
 MS21043-6 NUT (1)  
 (4 PLACES)  
**NOTE: INSTALL WASHER BETWEEN SKIDTUBE AND BUSHING**

**DETAIL N**



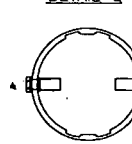
AN8C21A BOLT (1)  
 AN960JD816L WASHER (1)  
 NAS1515H8L WASHER (1)  
 MS21083C8 NUT (1)  
 (2 PLACES)

**DETAIL P**



AN8C35A BOLT (1)  
 AN960C816L WASHER (2)  
 NAS1515H8L WASHER (2)  
 MS21083C8 NUT (1)

**DETAIL Q**



AN3C6A BOLT (1)  
 AN960C10L WASHER (1)  
 NAS1515H3L WASHER (1)  
 (4 PLACES)

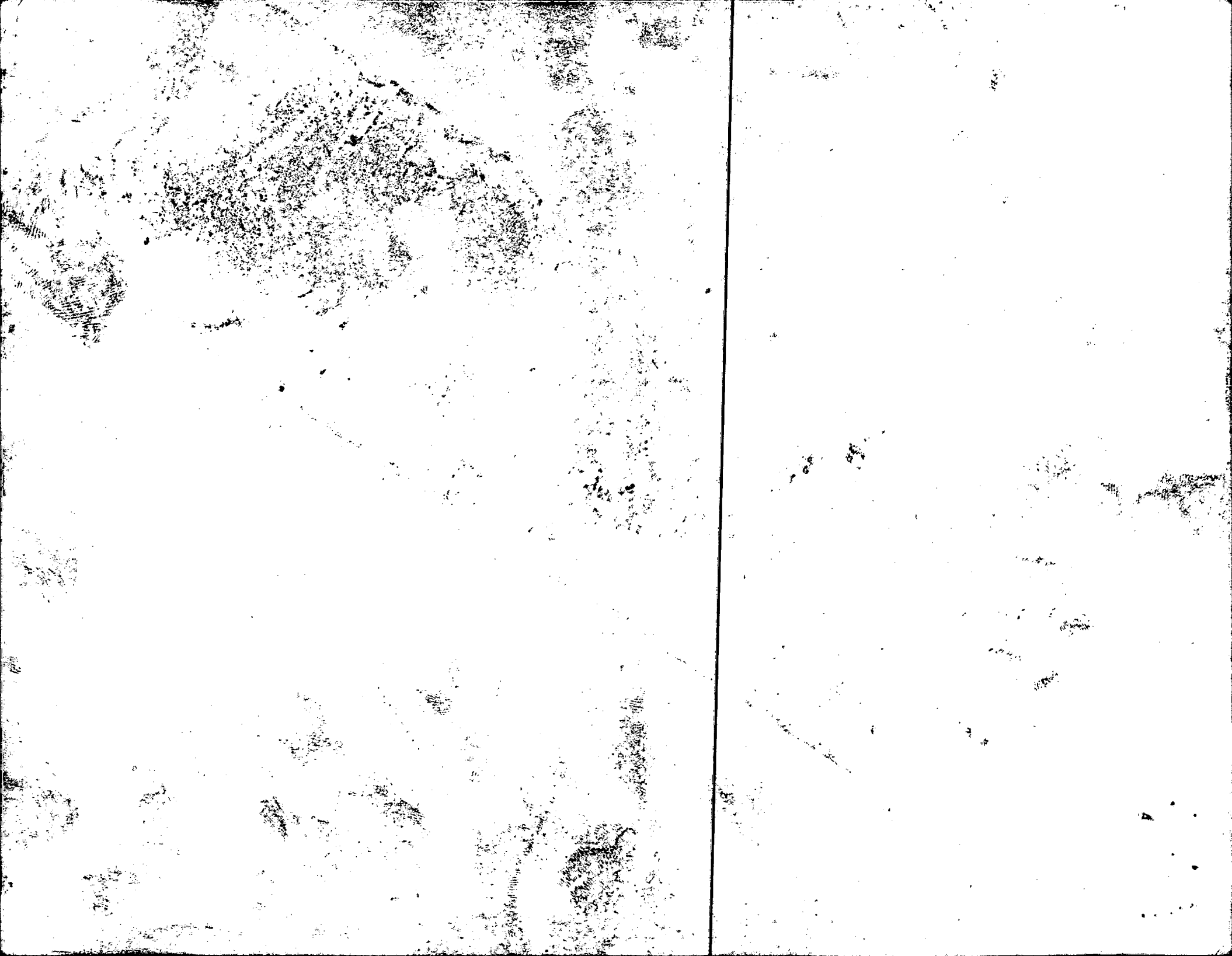
COPYRIGHT © 1988 BY DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

DESIGN PH	DRAWN BY PH	<b>DART</b> DART AEROSPACE USA, INC. PORT HADLOCK, MA	REV. D
CHECKED #	APPROVED #	DRAWING NO. D2750	SHEET 5 OF 5
DATE 06.01.05	TITLE 350 SKIDTUBE ASSEMBLY	SCALE 1:20	

SHOP COPY  
 RETURN TO  
 ENGINEERING  
 CONTROLLED COPY  
 SUBJECT TO  
 AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 105330





NO. 96

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name Barclay Elliott  
Joint Welding Procedure Tig  
Part number and Job number B350636013 / B30120

TEST WELDS REQUIRED

BASE METAL Alum WELDING PROCESS Tig  
Penetration Complete ☐ Partial ☒ Single Weld ☒ Double Weld ☐  
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐  
Penetration Pass ☒ Fail ☐  
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 07/03/05 Qualifier David Haval